
FRBSF WEEKLY LETTER

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Counting the Poor

The Census Bureau estimates that 13.1 percent of Americans, almost 32 million people, were living in poverty in 1988, the most recent year for which data are available. In that year, a family of four was considered poor if its annual income was less than \$12,092. After rising from 1979 to 1983, the poverty rate (that is, the percentage of Americans who are poor) has been declining slowly over the last five years. Nonetheless, a larger proportion of the population remains in poverty than at any time between 1967 and 1979. This *Letter* describes how the official poverty measure is constructed, discusses some of its limitations, and examines some proposals for revising it.

Estimating the poverty threshold

The official poverty threshold grew out of the work of economist Mollie Orshansky for the Social Security Administration in the 1960s. From surveys conducted in 1955, Orshansky found that an average three-person family spent about one-third of its income on food. From this, she reasoned that a measure of the cost of subsistence could be computed by taking the cost of a minimally-adequate food budget and multiplying by three. Using this simple "multiplier" methodology, poverty thresholds for 1967 were constructed for different types and sizes of families. Since 1967, the thresholds have been raised each year by the amount of the increase in the consumer price index for urban consumers (CPI-U).

The poverty thresholds do not directly determine eligibility levels for federal assistance programs. However, the "administrative poverty income guidelines" which determine eligibility are based on the poverty thresholds. In some programs, assistance is given to families above the poverty thresholds.

The poverty rate is defined with reference to money income only. In-kind transfers like food stamps, subsidized housing, and health-care benefits are not included since the dollar value of these noncash benefits in some cases is difficult to quantify. For example, it is difficult to

estimate the value of Medicaid to a family that is healthy, since that family is not permitted to substitute the subsidized medical care it does not use for more food or housing.

The Census Bureau attempts to measure the value of noncash benefits by comparing them to the amounts spent on similar items by nonpoor families. Using this approach, the Bureau estimates that including noncash benefits in income would reduce the poverty rate from 13.1 to 10.5 percent. This estimate probably should be regarded as only illustrative, since comparisons of the spending behavior of poor and nonpoor families are necessarily arbitrary. For example, only the poor live in public housing, so it is difficult to estimate what a nonpoor family would be willing to pay for such accommodation.

When it released the poverty estimates for 1988, the Census Bureau suggested that the estimates of the number of persons in poverty may be too high because the official thresholds may be too high. The reason is that, according to the revised consumer price index made available by the Bureau of Labor Statistics beginning in 1983, the rise in consumer prices between 1967 and 1982 was less than previously estimated. Consequently, even though the revised index has been used to update the poverty thresholds since 1983, the 1982 thresholds are too high. If these thresholds were revised downward to reflect the lower estimate of inflation during the 1967-82 period, the 1988 thresholds would be lower by about nine percent, reducing the poverty rate from 13.1 to 11.6 percent.

Absolute or relative?

This revision would be a purely technical one. In general, however, changes in the measurement of poverty cannot be separated from questions of what exactly we are trying to measure and what use is to be made of the data. In particular, is poverty an absolute or a relative concept? That is, should the poverty threshold be thought of as a subsistence level of income on which it is possible for a family to survive or as an income level

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that, in the words of Adam Smith, "the custom of the country renders it indecent for creditable people, even of the lowest order, to be [below]?" A threshold that is regarded as an absolute standard of need should be raised only to take account of increases in the cost of needed goods and services, while a threshold that takes into account the "custom of the country" presumably should rise as the incomes of nonpoor citizens rise.

Currently, the official poverty thresholds are absolute standards. They measure the cost in current dollars of a level of consumption that was considered adequate for subsistence in the mid-1960s. For statistical purposes, the advantage of such a standard is that it provides a benchmark against which we can measure progress over time in reducing the number of families in absolute need. If the poverty threshold were to be raised in line with the general standard of living—as Adam Smith's definition of poverty would suggest—this useful benchmark would be lost.

An absolute standard of poverty inevitably means that the living standards of families classified as poor fall further and further behind that of the average family. For this reason, advocates of a relative standard argue that the thresholds should rise with increases in average living standards. A recent study by the staff of the Joint Economic Committee of Congress (JEC) suggested raising the thresholds in line with the growth in median family income. The JEC staff estimates that if this were done, the poverty rate would rise from 13 to 16 percent.

Update the thresholds?

Some critics suggest that the official thresholds are unsatisfactory, even as absolute indicators of poverty, since expenditure patterns and the relative prices of food and nonfood items have changed considerably over time. These critics argue that the thresholds should be revised to reflect these changes.

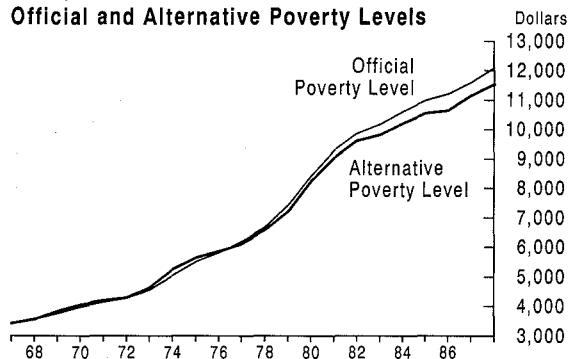
The initial poverty threshold was set at three times the cost of a minimally-adequate food budget, defined as the U.S. Department of Agriculture's Economy Food Plan, a low-income market basket developed in the 1960s. USDA has revised this market basket (now called the Thrifty

Food Plan) several times since 1967, but these revisions have not been incorporated into the calculation of the poverty thresholds.

Likewise, the threshold does not take into account changes in the relative prices of food and nonfood items. Because food prices have grown more slowly than has the average consumer price level, using the CPI to adjust the poverty threshold, in effect, has allowed the nonfood/food multiplier to rise over time.

Chart 1 compares the official threshold for a family of four with an alternative threshold that takes account both of USDA's revisions to the minimally-adequate food budget and of changes in the relative prices of food and nonfood items. In 1988, this alternative threshold was five percent below the official one.

Chart 1
Official and Alternative Poverty Levels



The JEC staff study argues, however, that a poor family cannot subsist on a total budget that is only three times the cost of the minimally-adequate food budget today. As evidence for this conclusion, the study points out that the average family now spends only one-fifth rather than one-third of its budget on food. Hence, the study concludes, the multiplier ought to be raised from three to five.

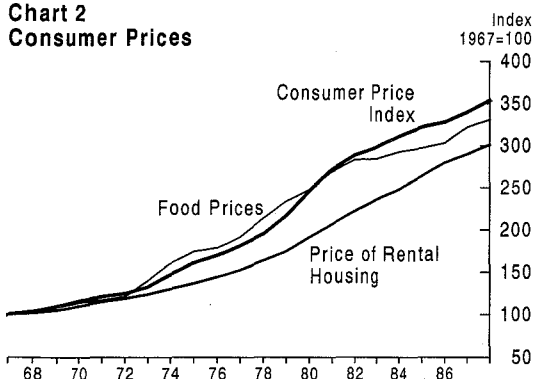
Adopting a higher multiplier just because the average family is spending less of its income on food may not be appropriate, however. As living standards rise, the proportions of income spent on necessities such as food tend to decline. Thus, to the extent that these changes in the composition of the average household's expenditures reflect rising affluence, the multiplier applied to food expenditures in constructing an absolute

poverty threshold should not be changed. In fact, adopting a higher multiplier in this situation is tantamount to adopting a relative, rather than an absolute standard of poverty.

What is important for constructing an absolute standard is the ability of poor households to subsist on a budget equal to the assumed multiple of the minimal food budget. Subsistence would become more difficult if the prices of other necessary items, such as housing, were to rise relative to food prices, or if new and necessary goods or services (such as child-care) were to emerge. In such cases, it would be appropriate to use a higher multiplier in computing the poverty threshold.

There is little evidence that major changes of this kind have occurred. Chart 2 compares the overall consumer price index with the indexes for food and for renter-occupied housing. Ideally, the CPI also should be compared with an index for the cost of owner-occupied housing. However, the index for the price of owner-occupied housing is not available for years prior to 1982, and since then, the prices of renter- and owner-occupied housing have risen by similar amounts.

Chart 2
Consumer Prices



Although relative prices clearly have not remained constant since the 1960s, the relative changes are less dramatic than the overall increase in average prices facing both rich and poor. In particular, these indexes do not suggest that the cost of housing has increased significantly faster than average prices.

Of course, it is possible that these price indexes do not accurately represent the housing costs faced by low-income families. However, data on household spending yield a similar conclusion. Between the consumer expenditure surveys in 1961 and 1985 the average share of total expenditures devoted to housing by families with incomes at the poverty threshold apparently remained roughly constant at about 35 percent. If the cost of housing had risen more than other prices, housing's share of total spending probably would have increased.

These data imply that the changes in average expenditure patterns that have occurred since the poverty thresholds were developed mainly reflect the increasing affluence of the average family rather than changes in relative prices. Thus, the case for revising the nonfood/food multipliers is not a compelling one if the goal is to preserve an *absolute* measure of the poverty threshold.

A compromise

Estimating the level of income at which households are regarded as "in poverty" is inevitably subjective. As a general proposition, one can agree with Adam Smith that poverty standards ought to reflect "the custom of the country." However, an absolute standard also is useful since it provides a benchmark against which one can measure progress in reducing poverty. The evidence discussed in this *Letter* does not suggest that the existing measures of poverty are biased indicators of this absolute standard.

As noted earlier, the disadvantage of an absolute standard is that when incomes are rising, the living standard of the poor falls ever farther behind that of the average family. This concern suggests that while an absolute standard can be used for statistical purposes, a relative standard could be used as the basis for eligibility levels for federal assistance programs. In this way, the income level at which poor persons can obtain federal assistance can rise with average income levels.

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